

[illegible]

M 15
16-Sep-1984 02:08:58
15-Sep-1984 22:49:32

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RPGRTL.SRC]RPGLIB.REQ;1 Page (1)

RPGLI Run-Time Library specific macros and symbols
File: RPGLIB.REQ, Edit: DG1001

```
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*****
```

Author: Debess Grabazs, 24-May-1983

1-001 - Original. DG 24-May-1983

+ This file is the master source for RPGLIB.L32.
It contains definitions for macros and symbols used internally to the
RPGLI Run-Time Library.

LINKAGE

```
JSB_STR= JSB
        (REGISTER = 0, REGISTER = 1 , REGISTER = 2):
        NOTUSED (9, 10, 11),

JSB_D= JSB
        (REGISTER = 0, REGISTER = 1 ; REGISTER = 0, REGISTER = 1):
        NOTUSED (6, 7, 8, 9, 10, 11),

JSB_67= JSB
        (REGISTER = 6, REGISTER = 7):
        NOPRESERVE (2, 3, 4, 5, 6, 7)
        NOTUSED (8, 9, 10, 11),

JSB_678= JSB
        (REGISTER = 6, REGISTER = 7, REGISTER = 8):
        NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
        NOTUSED (9, 10, 11),

JSB_6789= JSB
```


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```
: 0058 0      (REGISTER = 6, REGISTER = 7, REGISTER = 8, REGISTER = 9):  
: 0059 0      NOPRESERVE (2, 3, 4, 5, 6, 7, 8, 9)  
: 0060 0      NOTUSED (10, 11);  
: 0061 0  
: 0062 0      LIBRARY 'RTLSTARLE';          ! SYSSLIBRARY:STARLET.L32  
: 0063 0  
: 0064 0      REQUIRE 'RTLIN:RPGDEF';        ! Context area definitions
```

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File: RPGDEF.REQ, Edit:LPT1015

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FACILITY: VAX RPG II

ABSTRACT:

This is a common definition file for VAX RPG II. All definitions
of data structures that must be known by the compiler and the
generated code and RTL support should be included here.
This file should be required in COMLIB.REQ.

ENVIRONMENT: VAX/VMS user mode

AUTHOR: D. Braffitt, CREATION DATE: 12-Nov-1982

MODIFIED BY:

1-001	Original	DJB 12-Nov-1983
1-002	Add RPG\$LCCTX_ERROR	LPT 14-Feb-1983
1-003	Add program control block macros	LPT 18-Mar-1983
1-004	Add RPG\$K_ERR_SUBSC	LPT 24-Mar-1983
1-005	Add support for record control/sequence check blocks; add RPG\$IOEXCEPTION error location constants; add current CTX area ID	DJB 11-Apr-1983
1-006	RPG\$SCTX_PRINTER should be 32.	DJB 12-Apr-1983
1-007	Add RPG\$VCTX_RNF	DJB 14-Apr-1983
1-008	Change RPG\$A_RCB_EXTFL to RPG\$A_RCB_EXTFLD	LPT 25-Apr-1983
1-009	Add RPG\$VRCB_MATCH	LPT 10-Jun-1983
1-010	Fix offset of some RCB fields	LPT 10-Jun-1983
1-011	Add RPG\$VRCB_CNTRLF	LPT 22-Jun-1983

R0122	0	1-012	Add RPG\$V_CTX_OVPEND	LPT	5-Jul-1983
R0123	0	1-013	Correct PRINTER context area offsets	DJB	05-Jul-1983
R0124	0	1-014	Add RPG\$B_SCB_FLAGS	DJB	20-Jul-1983
R0125	0	1-015	Delete RPG\$A_CTX_MATCHAREA	LPT	21-Nov-1983
R0126	0				
R0127	0				
R0128	0				
R0129	0				
R0130	0				
R0131	0				
R0132	0				
R0133	0				
R0134	0				
R0135	0				
R0136	0	MACRO			
R0137	0	RPG\$W_CTX_FLAGS=	-4,0,16,0 %	Flag bits	
R0138	0	RPG\$V_CTX_UOFF=	-4,0,1,0 %	TRUE only if file is conditioned	
R0139	0			by an external indicator which is off	
R0140	0	RPG\$V_CTX_EOF=	-4,1,1,0 %	TRUE only if file is at end of file	
R0141	0	RPG\$V_CTX_LOOKAH=	-4,2,1,0 %	TRUE only if file is an input file	
R0142	0			which contains look-ahead fields	
R0143	0	RPG\$V_CTX_RNF=	-4,3,1,0 %	TRUE only if last attempt to read from	
R0144	0			file resulted in record not found	
R0145	0	RPG\$B_CTX_ID=	-1,0,8,0 %	Version number	
R0146	0	RPG\$L_CTX_ERROR=	-8,0,32,0 %	Error number for RPG detected errors	
R0147	0	RPG\$A_CTX_SCB=	-12,0,32,0 %	Address of current entry in the	
R0148	0			sequence control block	
R0149	0	RPG\$A_CTX_READ=	-16,0,32,0 %	Address of the READ routine	
R0150	0	RPG\$A_CTX_CRCB=	-20,0,32,0 %	Address of the current record control	
R0151	0			block	
R0152	0	RPG\$A_CTX_OVIND=	-12,0,32,0 %	Address of the overflow indicator for	
R0153	0			this PRINTER file	
R0154	0	RPG\$W_CTX_FL=	-14,0,16,0 %	# of lines on logical page (1-112)	
R0155	0	RPG\$W_CTX_OL=	-16,0,16,0 %	Overflow line # (1-112)	
R0156	0	RPG\$W_CTX_LINE=	-18,0,16,0 %	Current line on printed page	
R0157	0	RPG\$W_CTX_PFLAGS=	-20,0,16,0 %	Flags for print control	
R0158	0	RPG\$V_CTX_FIRST=	-20,0,1,0 %	TRUE only before first write to file	
R0159	0	RPG\$V_CTX_1PFORMS=	-20,1,1,0 %	TRUE only if first page forms	
R0160	0			positioning has been requested	
R0161	0	RPG\$V_CTX_OVLINE=	-20,2,1,0 %	TRUE is this is an overflow line	
R0162	0	RPG\$V_CTX_OVPEND=	-20,3,1,0 %	TRUE if overflow is pending	
R0163	0	RPG\$W_CTX_SKIPB=	-22,0,16,0 %	# of lines to space before printing	
R0164	0			(0-3)	
R0165	0	RPG\$W_CTX_SKIPA=	-24,0,16,0 %	# of lines to space after printing	
R0166	0			(0-3)	
R0167	0	RPG\$W_CTX_SPACEB=	-26,0,16,0 %	Line number to skip to before printing	
R0168	0			(1-112)	
R0169	0	RPG\$W_CTX_SPACEA=	-28,0,16,0 %	Line number to skip after printing	
R0170	0			(1-112)	
R0171	0	LITERAL			
R0172	0	RPG\$K_CTX_ID=	1,	Current CTX area id	
R0173	0	RPG\$S_CTX_OUTPUT=	8,	Size of context area for output files	
R0174	0	RPG\$S_CTX_PRINTER=	28,	Size of context area for printer files	
R0175	0	RPG\$S_CTX_INPUPD=	20;	Size of context area for input and	
R0176	0			update files	


```

R0177 0
R0178 0
R0179 0
R0180 0
R0181 0
R0182 0
R0183 0
R0184 0
R0185 0
R0186 0
R0187 0
R0188 0
R0189 0
R0190 0
R0191 0
R0192 0
R0193 0
R0194 0
R0195 0
R0196 0
R0197 0
R0198 0
R0199 0
R0200 0
R0201 0
R0202 0
R0203 0
R0204 0
R0205 0
R0206 0
R0207 0
R0208 0

```

+ Definitions for the RPGII file record control and sequence check blocks.
 This area is allocated in PSECT \$LOCAL by the compiler
 for each input and update file immediately following the record buffer.
 -

MACRO

RPG\$A_RCB_RECID=	0,0,32,0 %	! Addr of record identifying indicator
RPG\$A_RCB_EXTFLD=	4,0,32,0 %	! Addr of extract field routine
RPG\$A_RCB_MATCH_RTN=	8,0,32,0 %	! Addr of match field compare and extract code
RPG\$A_RCB_CFR=	12,0,32,0 %	! Addr of control field compare routine
RPG\$W_RCB_FLAGS=	16,0,16,0 %	! Record control block flag bits
RPG\$V_RCB_SEQ=	16,0,1,0 %	! TRUE if record type is seq checked
RPG\$V_RCB_MATCH=	16,1,1,0 %	! TRUE if record type has match fields
RPG\$V_RCB_CNTRLF=	16,2,1,0 %	! TRUE if record type has control fields
RPG\$A_SCB_RCB=	0,0,32,0 %	! Address of the RCB of the record which is the current record in the sequence
RPG\$B_SCB_FLAGS=	4,0,8,0 %	! Sequence control block flag bits
RPG\$V_SCB_OPT=	4,0,1,0 %	! TRUE if record type is optional
RPG\$V_SCB_NO=	4,1,1,0 %	! TRUE if more than one of this record type may be present
RPG\$V_SCB_1SEEN=	4,2,1,0 %	! TRUE if one of the current record type has been seend
RPG\$V_SCB_LAST=	4,3,1,0 %	! TRUE if this is the end of the table and RPG\$A_SCB_RCB contains the address of the 1st element in the SCB

LITERAL

RPG\$\$RCB=	18,	! Size of record control block
RPG\$\$SCB=	5;	! Size of sequence check block

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```

R0209 0
R0210 0
R0211 0
R0212 0
R0213 0
R0214 0
R0215 0
R0216 0
R0217 0
R0218 0
R0219 0
R0220 0
R0221 0
R0222 0
R0223 0
R0224 0
R0225 0
R0226 0
R0227 0
R0228 0
R0229 0
R0230 0
R0231 0
R0232 0
R0233 0
R0234 0
R0235 0
R0236 0

!+
! Definitions for RPG error handling.
! The address of the program control block is found in RPG$A_PCB
! which is found offset from the frame pointer.
! For version 1, the only field in the program control block
! is the internal version number.
!-

MACRO
    RPG$A_PCB=          -4,0,32,0 %;  ! Address of program control block
    RPG$B_PCB_ID=       0,0,8,0 %;   ! Version number

!+
! Definitions of first parameter to RPG$IOEXCEPTION to describe where
! to find IO error.
!-

LITERAL
    RPG$K_ERR_RAB=      1,           ! Condition value in RAB field
    RPG$K_ERR_FAB=      2,           ! Condition value in FAB field
    RPG$K_ERR_FILE_CNTXT= 3;         ! Condition value in file context area

!+
! Definition of literal for error passed to RPG$ERROR
!-

LITERAL
    RPG$K_ERR_SUBSC=     5;          ! Same as COBOL for now
```


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: 0237 0
: 0238 0 ! End of file RPGLIB.REQ

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	0	0	581	00:01.1

COMMAND QUALIFIERS

: BLISS/LIBRARY=LIB\$:/LIST=LISS\$:/SOURCE=REQUIRE SRC\$:RPGLIB

: Run Time: 00:03.4
: Elapsed Time: 00:15.5
: Lines/CPU Min: 4262
: Lexemes/CPU-Min: 14579
: Memory Used: 32 pages
: Library Precompilation Complete

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AH-BT13A-SE
VAX/VMS V4.0

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